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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,597	04/26/2001	Thomas W. Mossberg	5455P001X	8757
23892	7590	09/24/2003	EXAMINER	
DAVID S ALAVI 3762 WEST 11TH AVENUE #408 EUGENE, OR 97402			CURTIS, CRAIG	
		ART UNIT	PAPER NUMBER	
		2872		

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/843,597	MOSSBERG, THOMAS W.
	Examiner Craig H. Curtis	Art Unit 2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 July 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-84 is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) _____ is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) 1-84 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

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Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 55-63, 83, and 84, drawn to a process of making a configurable programmed holographic structure, classified in class 359, subclass 22.
 - II. Claims 39-50, 64-82, drawn to a method of re-configuring a configurable programmed holographic structure, classified in class 359, subclass 4.
 - III. Claims 1-38 & 51-54, drawn to a configurable programmed holographic apparatus, classified in class 359, subclass 15.
2. The inventions are distinct, each from the other, for at least the following reasons:

The process of making a configurable programmed holographic structure set out in Group I is distinct from both the method of re-configuring a configurable programmed holographic structure (or, more accurately, a method of using same) set out in Group II as well as the configurable programmed apparatus set out in Group III.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes is indicated as proper.

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4. Because these inventions are distinct for the reasons given above and the search required for Invention I is not required for Inventions II & III, and vice versa, restriction for examination purposes is indicated as proper.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Election of Species

7. Should Applicant elect Invention I, it is noted that this group contains claims directed to the following patentably distinct species of the claimed invention:

S1: making an *electronic device* (claims 55-56);
S2: making an *energy transfer device* (claims 57-59);
S3: making a *thermal device* (claims 60-61); and
S4: making an *optical device* (claims 62-63).

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8. Should Applicant elect Invention III, it is noted that this group contains claims directed to the following patentably distinct species of the claimed invention:

S1: *means for diffracting an input optical signal, producing a diffracted optical signal comprising an optical spectrum that differs from the input optical spectrum in at least one of amplitude and phase* (claims 1, 51-54, 64-74);

S2: *a plurality of diffractive elements exhibiting a positional variation...and a first temporal waveform and a respective second temporal waveform* (claims 2-4, 9, 10, 14);

S3: *a plurality of diffractive elements comprising a cross-correlating transfer function* (claims 5-8, 15, 18-21);

S4: *dynamic configuration being effected by an electronic circuit* (claims 11-13);

S5: *a second output signal* (claims 16, 17); and

S6: *a plurality of optical signals, at least two comprising temporal waveforms that differ from one another* (claims 22-35).

9. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there are no generic claims.

10. Applicant is advised that a reply to this requirement must include an identification of the species that is elected with this requirement, and a listing of all claims readable thereon, including all

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claims subsequently added: An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

11. Upon allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species MPEP § 809.02(a).

12. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Curtis, whose telephone number is (703) 305-0776. The facsimile phone number for Art Unit 2872 is (703) 308-7721.

Any inquiry of a general nature regarding to status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0956.



Audrey Chang
Primary Examiner
Technology Center 2800

Craig H. Curtis

Craig H. Curtis
Group Art Unit 2872
22 September 2003